

REMARKS

Applicants appreciate the detailed examination, evidenced by the Office Action mailed June 28, 2005 (hereinafter "Office Action"). Applicants further appreciate the withdrawal of the prior rejections and the continuing indication that Claims 11-14 recite patentable subject matter. Applicants have amended Claim 1 to incorporate recitations from Claims 2 and 3 and have canceled Claims 2 and 3. Applicants have also amended Claim 15 to clarify the nature of the claimed subject matter and overcome the antecedent basis error noted by the Examiner. Applicants submit that Claims 1 and 4-16 are patentable for at least the reasons presented below.

Claims 1, 6, 9 and 15 stand rejected under 35 U.S.C. §103 as being unpatentable over a combination of Applicants' alleged admitted prior art (hereinafter "Admission") and U.S. Patent No. 5,828,612 to Yu et al. (hereinafter "Yu"). As noted above, Claim 1 has been amended to incorporate recitations from Claim 3, and now recites:

A memory device, comprising:
a data line; and
a variable delay precharge circuit that receives a column bank address signal and a write enable signal and that precharges the data line responsive to the column bank address signal at a time that is determined by a state of the write enable signal, wherein the variable delay precharge circuit comprises:
a precharge circuit operative to precharge the data line responsive to a precharge control signal;
a precharge control signal generator circuit that receives the column bank address signal, that generates first and second delayed signals from the column address bank signal that are delayed by respective different first and second time periods with respect to the column address bank signal, and that applies to the precharge circuit, responsive to a precharge delay control signal, a selected one of a first precharge control signal generated from the first delayed signal and a second precharge signal generated from the second delayed signal; and
a precharge delay control circuit that generates the precharge delay control signal responsive to the write enable signal.

In rejecting Claims 1-7, 9, 10, 15 and 16, the Office Action does not indicate where Admission or Yu discloses or suggests "a precharge control signal generator circuit that receives the column bank address signal, *that generates first and second delayed signals from the column address bank signal* that are delayed by respective different first and second time periods with respect to the column address bank signal" and that "applies to the

precharge circuit, responsive to a precharge delay control signal, a selected one of a first precharge control signal *generated from the first delayed signal* and a second precharge signal *generated from the second delayed signal*." See Office Action, pp. 3 and 4.

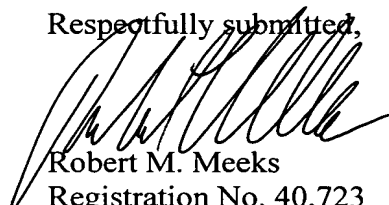
Neither Admission nor Yu provide such teachings. Moreover, contrary to the assertion in the Office Action, Yu provides no suggestion to modify Admission to provide such features. In particular, the portions cited from Yu (see Office Action p. 4) merely indicate that it may be desirable to provide independent precharge timing for read and write operations, and that such different timing may be achieved responsive to a write enable signal. However, there is nothing in Yu that teaches or suggests, for example, how first and second delayed signals generated from a column bank address signal could be used to generate such different timings.

Accordingly, Applicants submit that amended independent Claim 1 is patentable over Admission and Yu. Applicants submit that at least similar reasons support the patentability of independent Claims 6, 9 and amended independent Claim 15. Applicants further note that dependent Claims 4, 5, 7, 8, 10-14 and 16 are patentable at least by virtue of the patentability of the various ones of independent Claims 1, 6, 9 and 15 from which they depend, and that several of the dependent claims are separately patentable, as confirmed by the Office Action.

Conclusion

Applicants submit that the objections to and rejections of the claims are overcome for at least the reasons discussed above, and that the claims are, therefore, in condition for allowance, which is respectfully requested. Applicants encourage the Examiner to contact the undersigned by telephone to resolve any remaining issues.

Respectfully submitted,



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